

## CHAPTER SIX – PROFILES OF KEY CUSTOMER SEGMENTS

This chapter further “slices” the survey data to profile consumer segments of interest to SPU and its Purveyors. Key questions were crosstabulated by demographics (e.g., income), attitudes, and behaviors to discover if significant differences emerged. These differences help define which customer segments are already conserving and which segments provide opportunities for more conservation. (Please note that considerable overlap may exist for certain variables; for instance, 93% of homeowners live in single family homes, and 65% of renters live in buildings with three or more units.)

Crosstabulations where the Chi Square statistic was equal to  $<.05$  are highlighted in this chapter; this statistic means there was less than a 5% probability that the differences across groups occurred by chance. Customer segments related to attitudes are presented first, followed by segments for indoor and outdoor water uses. For Seattle/Purveyor comparisons, please see the previous chapters. For further specific statistics, please refer to the set of data tables, or the electronic data file, on file with SPU.

### Attitudinal Segments

#### *Importance Of Conserving*

Those who believe in the importance of conserving water have different attributes than those who feel conserving is not important. Those who feel conservation is very important more often:

- Live on small to average size lots. Those who say it’s not important to conserve tend to live on larger lots of  $\frac{1}{4}$  acre or more.
- Have incomes below \$75K. Those who say conserving is not important more often have incomes above \$75K.
- Are women (59%) rather than men (41%). Those who feel conserving is not important are more likely to be men (58%) rather than women (42%).
- Are more concerned about future water supplies and feel their individual actions can greatly affect water supplies.
- Are most motivated to conserve for environmental reasons (65%), as shown in **Table 16**. While the environment is an important motivator for all groups, saving the environment becomes a less strong motivator and money becomes a stronger motivator as the importance of conservation decreases.

**Table 16 - Most Important Reason To Conserve (Q 10) By Importance Of Conservation (Q4)**

<b>How important to conserve. . .?</b>	<b>Very Important %</b>	<b>Somewhat Important %</b>	<b>Not Important %</b>
Saving salmon	12	11	4
Saving money	12	16	24
Saving on new supplies	9	10	10
Saving the environment	65	59	50
N =	606	517	93

***How Much More Water Can You Save?***

Those who say their households can realistically save at least somewhat more water also differ from those who say they can't save more. Those that think they can save at least 5% more water are more likely to:

- Live in households with three or more occupants. Of those who say they can't save more water, 73% live in one and two person households.
- Be between 18 and 55 years of age. Of those who say they can't save any more water, 59% are above age 55.
- Have incomes above \$50K per year. 68% of those who say they cannot save more water have household incomes less than \$50K.
- Believe their individual actions can affect supplies and that conserving water is at least somewhat important.

**Indoor Use Segments*****Installing Low-Flow Showerheads***

In 1992, Seattle and Purveyor utilities distributed low-flow showerheads to their customers. In this survey, we asked consumers if they installed this showerhead and 51% overall said yes. Data show that certain consumer segments were much more likely to install the showerheads than others:

- The older the respondent, the more likely they were to report the showerhead had been installed, with younger respondents (18-34 years of age) much less likely than any other age group to report it had been installed (32% versus more than 50% for every other age group).
- The more importance consumers place on conserving, the more likely they were to report having installed the showerheads (56% among those who said it was

very important to conserve, compared to 29% among those who said it was not too important to conserve).

- No significant differences for showerhead installation emerged by ethnicity, income, gender, level of concern about water supply, and the most important motivation to conserve.

### ***Toilets: Awareness Of Water Used In Flushing***

The population data revealed that many consumers are not aware that toilet flushing is one of the top two uses of water indoors in most people's homes. However, certain groups of consumers are more aware of this than others, including:

- Significantly more multi-family than single family dwellers chose toilet flushing as a top use (54% to 46%). This is likely due to the lower proportion of clothes washers in multi-family homes.
- The smaller the household size, the more likely respondents were to pick toilet flushing as a top use (1 person = 62%; 2 persons = 48%; 3 persons = 41%).
- Older respondents were much more likely to choose toilet flushing (54% for those 65+ versus 43% for those 18-34).
- No differences emerged by ethnicity, income, gender, level of concern about water supply, the importance of conserving, or the most important motive to conserve.

### ***Toilets: Multiple Uses Before Flushing, Checking For Leaks, Replacements***

The number of toilets consumers have in their homes appears to be related to household size and type rather than any attitudes about conservation. However, the use, maintenance, and replacement of toilets vary by a number of factors.

Households who allow multiple uses before flushing the toilet (39% of the population), those who check their toilets for leaks (65%), and those who have replaced their toilets in the last seven years (29%) are already saving water as a result of these behaviors. Characteristics of households taking these conservation steps, and those that are not, are described below.

#### ***Those Who Allow (And Don't Allow) Multiple Uses Before Flushing***

- One person households are more likely to flush less than those in larger households (1 person = 42% allowing multiple flushes; 2 persons = 37%; 3+ persons = 39%).
- Those above 35 are likely to flush less than consumers in the youngest age group (18-34 years) where only 29% allow more than one use before flushing .

- As income decreases, so does the tendency to flush with each use. Consumers in the highest income group (\$100K+) are least likely to allow two or more uses before flushing (30%).
- Individuals who are concerned about future water supply and those who say it is very important for their household to conserve water are more likely to allow multiple uses before flushing.

*Those Who Check For Toilet Leaks And Those Who Don't*

- Homeowners are much more likely than renters to have checked their toilets for leaks, as are those living in single family homes compared to those living in multi-family homes.
- Older consumers are also much more likely to have checked for leaks than younger consumers (75% of those 55-64 compared to 46% of those 18-34).
- Men check for leaks much more often than women (69% to 61%).
- Consumers who believe it is very important to conserve have checked for toilet leaks more often (69% compared to 58% of those who say it's not too important to conserve).

*Those Who Have Replaced Toilets In The Past Seven Years*

- Those living in larger households are much more likely to have replaced a toilet in the past seven years.
- Consumers between 45 and 54 are the most likely to have replaced a toilet (34%) in that time frame.
- Those with the highest incomes (\$100K and above) are more likely than any other income category to have changed out a toilet (35%).
- No differences emerged by gender, level of concern about supply, the importance of conserving, or the most important motivation to conserve.

***Toilets: Future Replacements***

A toilet replacement program is currently being planned for residential customers. This section describes those who already plan to replace a toilet in working order in their home within the next two years (8%), and those who would likely do so if they could do it for \$100.00 and knew they would be paid back within two years through reduced water and sewer bills (18%). (Note: These groups are not mutually exclusive.)

*Those Who Will Likely Replace A Toilet On Their Own*

- As household size increases, so does the likelihood of toilet replacement (10% for single person households; 19% for 3+ member households).

- The plan to replace a toilet does not appear related to customer income, age, ethnicity, gender, or *most* attitudes about conservation (e.g., importance of conserving). Indeed, customers are most strongly motivated to replace their toilets by the desire to remodel their bathrooms.
- Still, those who think they can do more to save water are significantly more likely to say they will replace a toilet. And, consumers did give saving on water use and the water bill as a secondary reasons for toilet replacement. Saving water and saving on the bill more strongly motivate single family homeowners than other groups.

*Those Who Will Spend \$100.00 To Replace A Toilet If Payback Is Two Years*

- As household size increases, so does the likelihood of replacing a toilet under this scenario (14% for single person households; 21% for 3+ member households).
- Those aged 45-54 are the most likely to change out a toilet under this scenario (25%), while those who are 55+ are the least likely.
- As income rises, so does the interest in spending \$100 to replace a toilet (15% very likely for those households earning less than \$25K compared to 25% for those households with \$100K annual income).
- Among those who say they have a great deal more water to save, only 8% say they plan to replace a working toilet on their own. However, when presented with the scenario of spending \$100 and getting a two year payback, 24% say they would be very likely to replace their toilets. This scenario motivates all consumers, no matter how much they have to save, but those who think they have the most to save are the most motivated, as shown in the table below:

**Table 17 - Toilet Replacement Under Various Conditions**

	Save Great Deal More		Save Some More		Save a Little More		Save No More	
	On Own	Spend \$100	On Own	Spend \$100	On Own	Spend \$100	On Own	Spend \$100
How Likely to Install. . .	%	%	%	%	%	%	%	%
Very Likely	8	24	9	22	6	16	6	13
Somewhat Likely	9	24	10	25	6	24	5	12
N =	178	180	363	357	362	390	256	263

- As people feel it's more important to conserve, they're also more likely to say they will replace their toilet (22% who say it's very important to conserve are also

very likely to replace; only 9% of those who say it's not important to conserve are very likely to replace).

- Those who chose "saving salmon" as the most important motive to conserve are also the most likely, by far, to say they would likely change (29% very likely, compared to 19% who were most motivated by preserving the environment, and 12% each for those who were most motivated by saving on the bill and by wanting to delay the cost of new supplies).

## Outdoor Use Segments

### ***General Yard and Garden Practices***

#### *Who Maintains The Yard?*

Most consumers (75%) maintain their own yards, but there is variation by demographics as described below.

- Owners more often maintain their own yards than renters (77% vs. 63%), and renters more often use a yard service (22% vs. 12% for owners).
- Members of larger households more often maintain their own yards (86% for households of 3+ vs. 55% for single-person households), and single-person households more often use a yard service (29% vs. 7% for households of 3+).
- People 65 years and older are much less apt to maintain their own yards (63% vs. 75% for the population), and are more apt to use a yard service (23% vs. 13% for the population).
- Gender and attitudes toward conservation have no affect on whether or not individuals maintain their own yards.

#### *Who Mulches Planting Beds And Uses Compost?*

While demographics affect these two behaviors, attitudes about conservation and the environment are probably the strong determinants.

- Owners are more likely than renters to mulch their beds and use compost.
- Larger households and households with more land tend to compost more.
- The youngest age group of consumers (18-34 years) is significantly less likely to mulch their planting beds or use compost than older consumers.
- Caucasians are far more likely than other ethnic groups to improve their soil with organic amendments (68% compared to 34% for African Americans and 56% for Asians).
- The highest income group (100K+) is more likely to mulch their beds (64% vs. 54% for the population).

- Individuals who say it is very important for their household to conserve water; who feel their households' actions can greatly affect whether future water demands are met; who feel it's very important to conserve; and who are most motivated by saving the environment and salmon are also more likely to mulch beds and add organic amendments to soil.

### ***Incidence And Size Of Lawn***

The presence of and size of lawn are primarily affected by demographics and are mostly common sense (e.g., single family homes and those with larger lots are more likely to have larger lawns). Interestingly, size of lawn does not appear to be affected by individuals' attitudes towards water supply or conservation. For instance, those who feel it's very important to conserve do not have significantly smaller amounts of lawn in their yards.

### ***Importance Of Having A Green Lawn***

Customers were asked how important a green lawn was as part of their landscaping (36% overall say it's important) and how likely they would be to have a natural lawn (43% very likely). Some demographic characteristics (such as homeownership and income) affected preferences, and attitudes about conserving water had a consistent and strong effect.

- Owners more often say that a green lawn is important compared to renters (48% vs. 33%), and renters more often say that a green lawn is not at all important compared to owners (39% vs. 25%).
- Households where it is very important to conserve water are more likely to say a green lawn is not at all important (31%). But in households where conserving is not important, fewer feel lawns are not important (17%). A similar pattern holds true in comparing households that feel they can greatly affect future supplies by their individual actions versus those that feel individuals actions have little affect on future supplies, as shown in **Table 18** below:

**Table 18 - Importance Of A Green Lawn (Q27) By Conservation Attitudes**

Import of Green Lawn	Effect of Individual Actions			Importance of Conserving		
	Great %	Some %	Little %	Very %	Somewhat %	Not %
Very Important	14	16	24	14	16	21
Not At All Important	34	19	27	31	22	17
N =	365	391	82	437	361	58

- Individuals between 45 and 54 years are most likely to want a natural lawn (52% say very likely). Individuals 65 years or older are least likely to want a natural lawn (32% say not too or not at all likely compared to 24% in the population).
- The highest income groups (\$100K and over) are least likely to want a natural lawn (38% very likely), and 16% say they are not at all likely to have a natural lawn compared to 11% in the population.
- Individuals who say it is very important for their household to conserve water and those who feel their households' actions can greatly affect whether future water demands are met are most likely to want a natural lawn, as shown in **Table 19** below.

**Table 19 - Likelihood Of A Natural Lawn by (Q28) By Conservation Attitudes**

Likelihood of Natural Lawn	Effect of Individual Actions %			Importance of Conserving %		
	Great %	Some %	Little %	Very %	Somewhat %	Not %
Very Likely	51	36	41	48	41	25
Not At All Likely	10	10	15	12	9	17
N =	365	391	82	437	361	58

***Frequency of Watering***

Frequency of lawn watering is affected by some demographics (such as home ownership and income) and by individuals' attitudes towards conserving water.

- Renters are significantly more likely than homeowners to never water their lawns (42% to 30%).
- As income levels rise, so does the frequency of watering, as shown in the **Table 20** below.

**Table 20 - Frequency of Watering by Income Levels**

	Under \$25K %	\$25-\$50K %	\$50K-\$75K %	\$75-\$100K %	\$100K & above %
Waters twice a month or less (includes never water)	66	60	56	51	48
Waters once a week or more	33	38	43	48	51
N =	85	183	130	91	98



- Individuals who say it is very important for their household to conserve water and those who feel their households' actions can greatly affect future water supply are most likely to never water.

### ***Lawn Removal***

Removing lawn is one method for usually reducing use; 29% of the population overall have done so. The characteristics of those most likely to have removed part of their lawn are described below.

- Not surprisingly, single family homeowners are most likely to have removed part of their lawn.
- Those with the largest lots (1/4-1/2 acre and 1/2 acre or more) are least likely to have removed lawn (24% and 22%, respectively).
- Larger households are more apt to have removed lawn (33% for households of 3+ compared to 17% for single-person households).
- Individuals between 45 and 54 years are most likely to have removed lawn (39%), and those 65 years and older are least likely to have removed lawn (15%).
- Attitudes towards water conservation appear to have no effect on removal of lawn.

### ***Traditional and Environmentally Friendly Lawn Care Practices***

The findings suggest that there are two types of lawn care approaches. Unfortunately, they share some of the same demographic characteristics.

1. The non-environmentally friendly, "traditional" approach that picks up their lawn clippings, uses non-organic fertilizers, weed-n-feed, and pesticides. This group is also more likely to over-seed and aerate their lawns. They do not tend to be motivated by conservation attitudes, since those who follow these procedures are more likely to water often and less likely to never water.
  2. The environmentally friendly approach that uses a mulching mower and/or leaves their grass clipping on the lawn, organic fertilizers, no weed-n-feed and no pesticides. This group uses over-seeding and aerating less than the group above, but they do water less often and are motivated by the need to conserve.
- Those with two or more people in the household are much more likely to use a mulching mower (45% to 33% for single person households) and leave grass clippings on the lawn. However, larger households are also more likely to aerate and over-seed, and use pesticides.

- Unlike a variety of other findings, the youngest consumers (18-34) are also the most likely to use a mulching mower (54% compared to 43% in the general population) and leave on grass clippings. Older consumers are much more likely to use fertilizer (organic or otherwise) and weed-n-feed type products.
- Those households with the highest incomes are more likely than those with lower incomes to use fertilizer, weed-n-feed, aerate and over-seed, and use pesticides.
- Those who are more concerned about conservation are more likely to use fewer chemical products on their lawns.

### ***Watering Practices***

#### *Who Uses Low Volume Watering?*

- Those with lots over ½ acre in size are more likely to use low volume watering methods (38% vs. 29% for the population).
- Owners are more likely to use low volume watering methods (30% vs. 13% for renters).
- Use of low volume water methods increases steadily with age (17% for those 18-34 years old and 35% for those 55-64 years); however, use of low water methods falls off slightly among those 65 years and older to 29%.
- Individuals who say it is very important for their household to conserve water and those who feel their households' actions can greatly affect whether future water demands are met are more likely to use low volume watering methods.
- Those with low volume water systems are more likely to have removed lawn.

#### *Who Uses Automatic Sprinkler Systems?*

- Owners are more likely to use a sprinkler system than renters (22% vs. 14%).
- Individuals living on lots over ½ acre are more likely to use sprinkler systems (33% compared to 21% for the population).
- As income increases, there is a steady increase in the use of sprinklers: 33% of individuals in the top income bracket (\$100K and over) use sprinklers while 8% of those making less than 25K use them.
- Individuals who say it is not important for their households to conserve water are most likely to use an automatic sprinkler system (29% compared to 21% for the population). While automatic sprinkling systems can be the most efficient if used properly, this is probably not the reason people install them (i.e., for convenience, not conservation).